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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,964	06/26/2000	Tomoaki Watahiki	33216M047	1961

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EXAMINER

CHANG, JUNGWON

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/18/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/603,964

Applicant(s)

WATAHIKI ET AL.

Examin r

Jungwon Chang

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

FINAL ACTION

1. Claims 1-10 are presented for examination.
2. The objection for the drawings is withdrawn based on the new corrected drawings filed on 10/1/03.
3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proehl et al. (US 6,532,589 B1), hereinafter Proehl, in view of Shaheen et al. (US 6,374,109 B1), hereinafter Shaheen.
4. As to claim 1, Proehl discloses the invention substantially as claimed, including a resource reservation management apparatus for AV network that manages equipment resources connected to a network (col. 1, lines 8-13 and 17-19; col. 6, line 61 – col. 7, line 23), comprising:

EPG processing means for acquiring starting/ending time information of a broadcast program from EPG (electronic program guide; fig. 5; col. 5, lines 39-40 and 55-61) that is sent while being superimposed on the broadcast wave (708, fig. 7; col. 1, lines 44-46; col. 2, lines 41-43; col. 7, lines 56-61); and

frequency band information processing means for acquiring the frequency band information of the broadcast program (col. 5, lines 45-54);

frequency band resource management means for performing time management of the frequency band resource of the AV network by using a resource reservation management table (col. 6, lines 8-14 and 38-46);

a controller (fig. 3; 400, fig. 4; 912, fig. 9) that, upon receiving a reservation request, acquires the frequency band of a reserved program of the request from said frequency band information processing means and the starting/ending time information of the reserved program from said EPG processing means and, with reference (i.e. pointer) to said resource reservation management table (fig. 6; col. 5, line 62 – col. 6, line 14), when the frequency band can be allocated, reservation of the frequency band is registered in said resource reservation management table (920, 924, fig. 9; col. 8, lines 7-10), and

communication via a communication interface (col. 3, lines 13-18) using allocated secured frequency band is carried out when the start time of the reserved program is reached (col. 3, lines 44-50; col. 6, line 61 – col. 7, line 11).

5. Proehl does not specifically disclose determining whether the frequency band of the reserved program can be allocated. However, Shaheen discloses determining whether the frequency band of the reserved program can be allocated (col. 3, lines 34-36; col. 8, lines 27-36; col. 9, lines 54-60; col. 14, lines 31-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Proehl and Shaheen because Shaheen's detecting frequency

allocation availability would improve the bandwidth utilization by allowing the user to make full use of the available frequency bandwidth, thereby improve data throughput.

6. As to claim 2, Proehl discloses the frequency band information of the broadcast program with superimposed on said broadcast wave (708, fig. 7; col. 1, lines 44-46; col. 2, lines 41-43; col. 7, lines 56-61).

7. As to claims 3-6, Proehl discloses the frequency band information processing means acquires the frequency band information of said broadcast program via the Internet (col. 3, lines 16-18), from communication equipment (col. 3, lines 13-15), recording medium (col. 3, lines 15-16), or from information input by a user (col. 4, lines 63-66; col. 5, lines 16-18 and 34-36).

8. As to claims 7 and 8, Proehl does not specifically disclose providing a non-reservable frequency band. However, Shaheen discloses available bandwidth information within at least one frequency band of the plurality of frequency bands (col. 3, lines 34-36; col. 8, lines 27-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Proehl and Shaheen because Shaheen's frequency availability would improve the bandwidth utilization by allowing the user to make full use of the available frequency bandwidth, thereby improve data throughput.

9. As to claims 9 and 10, Proehl further discloses a medium (25a, 36, fig. 2; 51, fig. 5) that carries programs and/or data for achieving all or part of the means of the resource reservation management apparatus (col. 5, lines 39-61; col. 6, lines 15-17 and 38-46) and can be processed by means of a computer (29, fig. 2; col. 6, lines 8-14).

10. Applicant's arguments filed on 10/1/03 have been fully considered but they are not persuasive.

11. In the remarks, applicants argued in substance that (1) Shaheen fails to remedy the deficiencies of Proehl described above. Applicants' invention has a frequency band information processing means for acquiring the frequency band information of the broadcast program. In contrast, Shaheen's apparatus reserves a particular frequency band (i.e., 800 MHz). Shaheen neither teaches nor fairly suggests acquiring the frequency band information of a particular broadcast program.

12. Examiner respectfully traverses applicants' remark.

As to point (1), applicants' argument is not persuasive. Shaheen clearly discloses a plurality of frequency bands (col. 3, lines 24-43), and acquiring the frequency band information of the particular broadcast program (col. 4, lines 1-6; col. 6, lines 1-8).

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)308-9052. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9669.

Jungwon Chang
December 12, 2003



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